

CLAIMS

1. Flame retardant artificial polyester hair, which is formed from a composition obtained by melt-kneading 5 to 30 parts by weight of
5 a bromine-containing flame retardant (B) having a melting point of 160°C to 320°C and a 5 % loss on heat temperature of 220 to 450°C based on 100 parts by weight of a polyester (A) comprising at least one selected from the group consisting of polyalkylene terephthalate and a copolymered polyester comprising polyalkylene terephthalate as the
10 main component.

2. The flame retardant artificial polyester hair of Claim 1, wherein the polyalkylene terephthalate is at least one kind of a polymer selected from the group consisting of polyethylene terephthalate,
15 polypropylene terephthalate and polybutylene terephthalate.

3. The flame retardant artificial polyester hair of Claim 1 or 2, wherein the bromine-containing flame retardant (B) is a mixture of a bromine-containing flame retardant (b1) having a 5 % loss on heat
20 temperature of 220 to 310°C and a bromine-containing flame retardant (b2) having a 5 % loss on heat temperature of 310 to 450°C, and the mixing ratio of (b1) and (b2) (weight ratio) is 20/80 to 80/20.

4. The flame retardant artificial polyester hair of Claim 3,
25 wherein the bromine-containing flame retardant (B) is at least one kind of a flame retardant selected from the group consisting of hexabromocyclododecane, tris(tribromoneopentyl) phosphate,

pentabromotoluene, hexabromobenzene, tetrabromophthalic anhydride,
a decabromodiphenyl ether, tetrabromobisphenol A,
tetrabromobisphenol A type polycarbonate oligomer,
poly-4,4-isopropylidene bis(2,6-dibromophenyl) carbonate,
5 1,2-bis(2,4,6-tribromophenoxy)ethane,
2,4,6-tris(2,4,6-tribromophenoxy)-1,3,5-triazine and
bis(4-hydroxy-3,5-dibromophenyl)sulfone.

5. The flame retardant artificial polyester hair of Claim 3,
10 wherein the component (b1) is at least one kind of a flame retardant
selected from the group consisting of hexabromocyclododecane,
dibromoneopentyl glycol, tris(tribromoneopentyl) phosphate, ethylene
dibromide-4,4'-isopropylidene bis(2,6-dibromophenol) condensate,
tris(2,3-dibromopropyl) isocyanuric acid, pentabromotoluene,
15 hexabromobenzene, tetrabromophthalic anhydride, dialkyl
tetrabromophthlate, tetrabromobisphenol A, tetrabromobisphenol
A-bis(allyl ether), tetrabromobisphenol A-bis(hydroxyethyl ether),
1,2-bis(2,4,6-tribromophenoxy)ethane and octabromodiphenyl ether
and the component (b2) is at least one kind of a flame retardant selected
20 from the group consisting of decabromodiphenyl ether,
tetrabromobisphenol A-bis(2,3-dibromopropyl ether),
tetrabromobisphenol A type polycarbonate oligomer,
poly-4,4-isopropylidene bis(2,6-dibromophenyl) carbonate, a
pentabromobenzyl acrylate polymer, brominated polystyrene, a
25 brominated epoxy resin, a brominated phenoxy resin,
2,4,6-tris(2,4,6-tribromophenoxy)-1,3,5-triazine,
octabromotrimethylphenylindan,

tetradecabromodiphenylphenoxybenzene, and
bis(4-hydroxy-3,5-dibromophenyl)sulfone.

6. The flame retardant artificial polyester hair of any one of
5 Claims 1 to 5, which is formed from a composition obtained by further
mixing a flame retardant aid (C) with the polyester (A) and the
bromine-containing flame retardant (B).

7. The flame retardant artificial polyester hair of Claim 6,
10 wherein the flame retardant aid (C) is at least one selected from the
group consisting of an antimony trioxide compound, an antimony
pentoxide compound and sodium antimonate.

8. The flame retardant artificial polyester hair of any one of
15 Claims 1 to 7, wherein the artificial hair is in the state of non-crimping
fiber yarn.

9. The flame retardant artificial polyester hair of any one of
Claims 1 to 8, wherein the artificial hair is spun-dyed.

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10. The flame retardant artificial polyester hair of any one of
Claims 1 to 9, wherein the artificial hair has a single fiber fineness of 10
to 100 dtex.